Task 2.1

**1) Taking into account ALL generated returns, does your team think it is more probable to obtain a positive or negative return?**

Based on the generated return values for the portfolios, it is more likely that positive returns will occur, as the median *(4,17%)* and average *(5,54%)* return values are positive. Also, the maximum return *(23,90%)* is much higher than the minimum (-6,69%). As the median return is lower than the mean, this indicates that there are negative returns pulling down the overall average. This can also be seen in Figure 1, which plots all return values in a bar chart. Nevertheless, the proportion of negative return values is very low, at 12.7%.

Besides the histogram and kernel density plot show a high density of shares between 0 and 5% (see Figure 2 and 3). The distribution is slightly skewed to the right with a skewness of 0.78. This indicates a few very high returns and suggests that there may be more positive returns than negative returns.

Taking all those informations into account, it is more probable to obtain a positive return from the portfolios of Smallville Asset Management. However, with an average of about 5 % the return of invest (ROI) is not considered as very high. According to the Forbes magazine, “an annual ROI of approximately 7% or greater is considered a good ROI for an investment in stocks”[[1]](#footnote-1).

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Automatisch generierte Beschreibung

Figure 1 All return values as bar chart

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Figure 2 Distribution of return values (Histogram)

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Figure 3 Distribution of return values (Kernel density plot)

1. <https://www.forbes.com/advisor/investing/roi-return-on-investment/#:~:text=According%20to%20conventional%20wisdom%2C%20an,S%26P%20500%2C%20accounting%20for%20inflation> [↑](#footnote-ref-1)